AGENDA ITEM V A

PROPOSED NEW ACADEMIC PROGRAM LSU HEALTH SCIENCES CENTER AT NEW ORLEANS Ph.D. in EPIDEMIOLOGY

BACKGROUND INFORMATION

The Letter of Intent for this program was approved by the Board of Regents in August of 2008; a program proposal was approved by the LSU Board of Supervisors and received in Regents/ Academic Affairs in March 2009. The campus recently updated its proposal to assure that information is current.

Academic Affairs Policy 2.05: Review of Proposals for New Academic Programs indicates that all highly technical and unique graduate level programs will be reviewed by external consultants who are expert in the field. Accordingly, but in deference to current economic conditions, Sharon Cooper, Ph.D., Professor and Regional Dean of the San Antonio Regional Campus, University of Texas Health Sciences Center at Houston School of Public Health was contracted to conduct an off-site review of the proposal. Her report was received by the Academic Affairs staff in April 2010. The School of Public Health and the Health Sciences Center responded to the report, providing additional information and resolving concerns identified in the report. Therefore, only crucial components of the report and the HSC's responses, shown in italics, are included in the abbreviated summary which follows.

Copies of the consultant's full report and the institution's response are on file in Academic Affairs.

STAFF SUMMARY

1. Description

Students enrolling in the proposed program will be trained to study the factors affecting the health or illness of populations, methods used for prevention or treatment of diseases and techniques used to investigate development/transmission of diseases and related public health issues. The rigorous curriculum requires a minimum of 60 semester credit hours (SCH) for students with a Master's in Public Health (MPH) in epidemiology, usually completed in three years, or 83 SCH for students without prior education in epidemiology, which is usually completed in five years of full time study.

External Reviewer's Report: The proposed breadth of courses is excellent and represents a broad, rigorous, and well-integrated sequence of courses as the foundation for a rigorous Ph.D. in epidemiology.

The program addresses the needed movement of the field and country to prevention and a population focus. It also recognizes the importance of and is planning courses in the emerging fields of molecular epidemiology and gene-environmental interactions. The one way in which the program is not addressing how the field is moving is by limiting the program to full-time students, apparently a requirement of the graduate school. This is also reflected in the current apparent lack of or even plans for delivery of online and video conferencing for some of the courses.

[Staff note: A letter from the Vice Chancellor for Academic Affairs and the Dean of the School of Public Health (SPH) at the LSUHSC-New Orleans (HSC) was sent to the Vice President for Academic Affairs of the LSU System in late April, indicating that the HSC was amenable to the admission of working healthcare professionals as part-time students seeking doctoral training in the SPH. A copy of this letter was provided to the Academic Affairs staff as documentation of the policy change.]

Response:

The LSUHSC School of Graduate Studies and the SPH agree that accepting part-time students would be very advantageous. This is the norm in most SPHs and would offer much needed opportunities for our existing workforce in Louisiana. ... The LSUHSC SPH has used alternative forms of delivery dating back to the first semester after hurricane Katrina. We rapidly acquired an interactive software program that was made available to our MPH students and faculty wherever they were located and resumed classes exactly one month after landfall. The MPH educational programs at the SPH, including Epidemiology, have access to a dedicated classroom equipped with Access Grid technology. This technology can now be used to enhance our doctoral program offerings. The Access Grid allows point-to-point videoconferencing and education to Access Grid nodes throughout the State of Louisiana and this has been quite successful.

In addition, specific masters' level courses are currently offered on a limited basis using a combination of lecture capture recordings and live webinars for group discussions. This approach allows students both synchronously and asynchronously to receive educational instruction at a variety of locations and times, mitigating the need to be located near an Access Grid node. Lecture capture is no longer considered just an option to the educational experience. Students more frequently are requesting the use of this technology for distance learning, but also to view missed classes or as a supplementary resource for lecture review. The LSUHSC SPH is evaluating the expansion of lecture capture and webinar technologies to offer a variety of courses to both part time and full time students who are not physically located in the Greater New Orleans Area and as an additional learning benefit to attending the live lecture. The addition of lecture capture technology will aid our ability to achieve enrollment goals through online and hybrid courses, without being limited by classroom or faculty resources. In addition, it allows us to automatically create term-long class archives and a backup solution to aid in disaster recovery.

2. Need

No state supported institution in Louisiana offers doctoral education in epidemiology; Tulane University in New Orleans offers both the Ph.D. and a Doctor of Public Health in epidemiology. The nearest public programs are located at the University of Texas Health Sciences Center in Houston and the University of Alabama at Birmingham.

From the proposal:

Only 4% of the staff in the Louisiana Office of Public Health currently have training in public health at the graduate level. ... According to the Association of Schools of Public Health (www.asph.org) and the American Public Health Association (Nation's Health, May 2008) the current and projected shortage of public health workers is reaching a critical level.

- By 2012, over 100,000 public health workers are eligible to retire 23% of the current workforce.
- In order to have the same public health workforce to population ratio in 2020 as existed in1980 (220 to 100,000), the public health workforce would need to number over 700,000, or over 250,000 more than the most recent count.
- To educate over 250,000 additional public health workers by 2020, schools of public health will have to increase their number of graduates *three-fold over the next 12 years.*"

The high poverty rate and low educational level in Louisiana's population were linked to high levels of morbidity and mortality in its citizens prior to Hurricane Katrina, which impacted the delivery of healthcare to some citizens. A recent focus on prevention rather than treatment of disease requires knowledge of risk factors of diseases and appropriate methodologies for prevention.

These shifts in emphasis are occurring on both a state and national level. However, Louisiana and the Gulf Coast region have unique needs with regard to epidemiology due to our unique population and our post-Katrina environment. ... Statistics have shown that not only do Louisiana residents rank among the highest in the nation for the prevalence of major diseases, there are also substantial racial disparities in disease risk and severity as well as mortality. Limited availability of preventive risk reduction programs as well as limited access to health care and poor insurance coverage are key obstacles in achieving improved health outcomes and reducing disparities. With the loss of the healthcare infrastructure in Louisiana and the Gulf South after Katrina these disparities are likely to increase. In 2005, most areas of the state were designated as medically underserved (cdc.gov; 2005 Louisiana Health Report Card). In 2008, the overall performance for Louisiana based on over 100 measures of health is in the "very weak" range, according to the National Healthcare Quality Report, released by the Agency for Healthcare Research and Quality (http://statesnapshots.ahrq.gov). The need for doctoral level epidemiologists, public health practitioners and researchers as well as academic faculty in Louisiana is critical if we are to address the issue of health disparities among medically underserved populations. It is important to recognize that the doctoral program at LSUHSC SPH is likely to produce academicians, researchers and practitioners who will remain in Louisiana throughout their professional careers, based on the experience of the other Schools in the LSU Health Sciences Center.

The HSC has indicated that establishment of doctoral programs in the SPH represents much more than satisfying an accreditation criterion. The SPH has a strong research program as well as a strong externally funded system of public health service/delivery programs in cancer, HIV/AIDS, juvenile corrections, tobacco cessation and more. For AY 2009-2010, external funds from federal, state and private granting sources or contracts total \$23, 504, 404; the school has an annual allocation of \$5,042,000 in state funding. In schools of public health in the US, instruction and research are essential for training doctoral students, but these students are crucial to successful research programs. These graduate students bring energy, dedication and fresh insight to research activities via cost-effective assistantships. Growth of research endeavors in the SPH is restricted by its need for doctoral students to participate in research. The Patient Protection and Affordable Care Act, as modified by the Health Care Reconciliation Act of 2010, was recently signed into law by President Obama. It is noteworthy that the legislation authorizes, with dollar amounts specified, the US Secretary of Health and Human Services to expand fellowship programs in epidemiology.

Current research attests to the necessity for utilizing trained epidemiologists to address public health and disease in populations. Graduates will also be trained to become instructors for subsequent bachelor's, master's and doctoral level students who will be needed to address future public health workforce demands.

3. Students

Graduates of the HSC's MPH program are well qualified for doctoral programs in the SPH.

Others desiring training in epidemiology, with or without master's level training in public health, may apply, both from Louisiana and out-of-state. The School of Graduate Studies at the HSC sets minimum criteria for admission, but allows individual programs to set more stringent requirements. The admissions process is well defined; all aspects of the protocol for admitting students are in place and are similar to the admissions practices for other SPH.

There was concern in the health education community that working public health professionals would be precluded from enrolling in upper level degree programs by the requirement for full-time status. Fortunately, the HSC has revised its policy to allow part-time enrollment to this large pool of students who will pay tuition.

4. Faculty

Epidemiology faculty within the SPH are well qualified to teach doctoral students and direct them in relevant research projects. A need for additional faculty is not projected in the first five years of program implementation, although rapid growth of the program could result in additional need.

The Allen Copping Award for excellence in teaching is given annually at Spring Commencement to one faculty member from each of the six schools of the LSUHSC. The recipient in the SPH is selected by a committee comprised of students representing all of its academic programs. This prestigious award has been given six times; two recipients were faculty in epidemiology.

External Reviewer's Report: The faculty's knowledge and understanding of their areas can be assumed to be very thorough and up-to-date, by the quality of their CVs—in terms of publications, external grant funding, high level of professional service/recognition, and experience with teaching and mentoring students....The proposal actually projects enthusiasm, and the [CEPH] consultant mentions the enthusiasm of the faculty.

5. Resources.

All necessary resources, facilities, and equipment are present.

6. Administration

The proposed interdisciplinary program will be administered by the epidemiology section of the SPH, though the Ph.D. in Epidemiology will be awarded by the LSUHSC School of Graduate Studies. An appropriate mechanism for admission, placement, testing and evaluating student progression through doctoral degree requirements is in place in the SPH.

Faculty will answer to the program director, who in turn will report to the Dean of SPH. Deans ultimately report to the Vice Chancellor for Academic Affairs at the HSC, who appropriately directs the School of Graduate Studies.

7. Accreditation

The Council on Education in Public Health (CEPH) is the agency which accredits Schools of Public Health and programs not housed in SPH. CEPH requires that schools must "offer three doctoral degrees in public health disciplines, with students enrolled in all three programs and graduates from at least one by the time of the site visit or within two years of the application date, whichever comes first" to be considered for accreditation. A Ph.D. in Biostatistics was implemented in Fall 2007; graduates are anticipated in Fall 2011. If approved, epidemiology will become the second doctoral offering. [Staff note: Placement of a third doctoral program in the SPH, the Ph.D. in Community Health, is anticipated for June 2010 Board of Regents agenda.]

CEPH accreditation not only guides appropriate instruction, it is a prerequisite for public health graduates to be eligible for certification by the National Board of Public Health Examiners. Consequently, lack of CEPH accreditation affects the caliber of students applying to the program and potentially impacts the ability of faculty to garner grant monies to support research and graduate students.

In preparation for its application to CEPH, the SPH hired an experienced public health educator to review its proposal for the program and to conduct an onsite visit at the HSC in Summer 2008. She submitted a detailed report assessing the proposal and School's potential for success as a candidate for accreditation.

<u>External Reviewer's Report:</u> An experienced CEPH site visitor (and former Associations of Schools of Public Health-elected member of CEPH Board of Councilors) did an initial review of this program, was very favorably impressed, and made specific and constructive recommendations. The applicants well addressed the consultant's comments, and incorporated the suggestions into this proposal. This Ph.D. program is critical to the future accreditation by CEPH.

8. Costs

The only significant additional costs beyond the current expenditures of the epidemiology section and SPH to be incurred by implementation of the proposed program will be for assistantships and tuition waivers for full-time doctoral students. The annual stipend for pre-doctoral study recommended by the National Institutes of Health is \$24,000 for AY 2009-10. The SPH advocates this level of support as well as tuition waivers to attract well gualified Ph.D. students.

At time of proposal submission, \$100,000 was allocated for fellowships and stipends for graduate students. Four assistantships are projected for the initial year of program implementation. SPH indicates that it will not seek additional State funds to support the program and that by year two it will seek Board of Regents Fellowships for highly qualified students. HSC funding will be used primarily to support new doctoral students; as they become involved in research, many students will be supported by external grant monies awarded to the faculty directing the project. Fourteen assistantships are projected by the fourth year of implementation. Implementation of additional doctoral programs in the SPH and subsequent achievement of CEPH accreditation will make the SPH eligible to apply for assistantship funding from the US Public Health Service and other agencies which restrict such assistantship awards to accredited schools of public health. Accessibility to additional funding will maximize the number of graduate students who can be trained and minimize the cost to the institution and State.

[Staff note: The SPH has been quite successful in competing for Regents Fellowships for highly qualified doctoral students in its biostatistics program.]

STAFF ANALYSIS

The proposed program is academically sound and in keeping with current approaches in epidemiology education. The staff compliments the LSU Health Sciences Center in New Orleans for responding quickly to the recommended need for admission of working healthcare professionals into advanced public health programs as part-time students. Need for the program is justified by numerous indices. Graduates and research resulting from implementation of the program will both benefit Louisiana. Interested students are present in the State. Well qualified faculty are employed in the School of Public Health. All necessary facilities, equipment and library resources are present at the HSC for doctoral students in the proposed program. Program implementation should not impact the campus administration. Additional costs of offering the program are necessary for the HSC to fund graduate assistantships at levels comparable to those of established programs. However, the amount needed for support of initial students is already included in the SPH budget for AY 2010-11. Tuition paid by PT students will augment the program budget.

A remaining concern is utilization of alternate delivery methods to provide coursework to students in other locations. Online courses should be developed. Video conferencing should be utilized to offer components of the epidemiology program to individuals around the State. The Louisiana Clinical & Transformational Science Center, a secure web based conferencing system, provides a mechanism through which slide and video presentations with capabilities for "chatting" and asking questions is available to individuals in their own worksites. In addition to graduate students in public health, a clinical epidemiology course available remotely could provide necessary instruction to residents in graduate medical education programs with

research requirements. Access grid technology should be utilized for delivery of epidemiology to the LSUHSC in Shreveport, and potentially to Baton Rouge, where a building to be constructed for graduate medical education in association with the OLOL hospital may offer suitable facilities. Staff observes that the SPH has been forward thinking in the utilization of distance learning methods to extend offerings in biostatistics to students in other locations and to maximize utilization of biostatistics faculty.

That adequacy of funds will remain available to support FT doctoral students as a program of quality develops also remains a concern. Both institutional monies and extramural funding will be needed to provide competitive levels of support necessary to attract highly qualified students. Consequently, progress reports addressing these issues will be necessary.

STAFF RECOMMENDATION

The staff recommends that the Academic and Student Affairs Committee grant conditional approval for the Ph.D. in Epidemiology (CIP Code 26.1309) at the LSU Health Sciences Center in New Orleans, effective immediately. By August 1, 2011, and annually on that date until accreditation by CEPH has been achieved, a report is due addressing:

- 1. Adequacy of funds to support graduate assistantships in the program;
- 2. Numbers of full and part-time students enrolled, plus information on placement of program graduates, as appropriate.
- 3. Documentation of utilization of distance delivery to make courses in the program available to part-time students at remote locations.
- 4. Progress toward CEPH accreditation.